

P.B.5818 - Patentlaan 2 2280 HV Rijswijk (ZH) 2 (070) 3 40 20 40 FAX (070) 3 40 30 16 Europäisches Patentamt

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Date 29.11.06

Reference 3171EP0W	Application No./Patent No. 04728959.0 - 2404	PCT/JP2004005829	
Applicant/Proprietor Takeda Pharmaceutical Company Limite	ed .	·	

COMMUNICATION

The European Patent Office herewith transmits the supplementary partial European search report under Rule 46(1) EPC relating to the above-mentioned European patent application.

Copies of the documents cited in the search report are enclosed.

The applicant's attention is drawn to the following

The Search Division informs the applicant that if the European search report is also to cover inventions other than the invention first mentioned in the claims, a further search fee must be paid for each of these inventions, within **one month** after notification of this communication.

If the application has been filed up to 30 June 1999, the search fee in force before 01 July 1999 (EUR 869,--) or the equivalent applicable on the date of payment is payable.

This applies also to the search fees requested under Rule 46(1) EPC.

See also OJ EPO 06/1999, 405.

Moreover, the Search Division considers that the present European patent application does not comply with the provisions of the European Patent Convention to such an extent that it is not possible to carry out a meaningful search into the state of the art on the basis of some of the claims; reference is made to sheet C, which is attached to the search report.

Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

Note to users of the automatic debiting procedure:

Unless the EPO receives prior instructions to the contrary, the search fee(s) will be debited on the last day of the period for payment. For further details see the Arrangements for the automatic debiting procedure, Supplement 2 to OJ EPO 01/2005.



Registered letter EPO Form 1507.3 07.99



SUPPLEMENTARY PARTIAL EUROPEAN SEARCH REPORT

Application Number

under Rule 46, paragraph 1 of the European Patent EP $\,$ 04 $\,$ 72 $\,$ 8959 Convention

Category	Citation of document with of relevant pas	Indication, where appropriate, sages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
P,Y	WO 03/080098 A2 (B STEFAN [DE]; BRUEG ANDREAS) 2 October * pages 83-97 *	GEMEIER ULF [DE]; GEERTS	1-4	INV. G01N33/50 G01N33/15 C12Q1/02 A61K39/395
Υ	FPRL1/lipoxin A4 reagonist for the or chemoattractant reJOURNAL OF BIOLOGICS SOCIETY OF BIOLOCH BIRMINGHAM, US, vol. 276, no. 24, 15 June 2001 (2001-21585-21593, XP002-15SN: 0021-9258 * abstract *	r-Met-Val-Met-NH2 ates neutrophils through eceptors and is an phan monocyte-expressed ceptor FPRL2" CAL CHEMISTRY, AMERICAN EMICAL BIOLOGISTS, -06-15), pages 973365	1-4	A61K45/00 A61K48/00 A61P1/04 A61P1/16 A61P3/10 A61P9/00 A61P11/00 C07K14/72 A61K38/17
	* page 21586, colu	mn 1 *		TECHNICAL FIELDS
				SEARCHED (IPC)
	*			G01N
,	*			
LACK	OF UNITY OF INVEN	TION		
The Sear	rch Division considers that the preser	nt European patent application does not comply ites to severatinventions or groups of inventions		N Nimmon
see	sheet B			
The pres	ent partial European search report hoppication which relate to the invention	as been drawn up for those parts of the Europe	as	
haseur at	Place of search	Date of completion of the search		Examiner
•	Munich	17 November 2006	Hoh	wy, Morten
-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
X:par Y:par doc	CATEGORY OF CITED DOCUMENT ricularly relevant if taken alone ricularly relevant if combined with an current of the same category chnological background	E : earlier patent do after the filing da	cument, but publite in the application or other reasons	lished on, or



SUPPLEMENTARY PARTIAL EUROPEAN SEARCH REPORT

Application Number

EP 04 72 8959

	DOCUMENTS CONSIDERED TO BE RELEVANT	CLASSIFICATION OF THE APPLICATION (IPC)	
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
Т			
'	HARADA M ET AL: "N-Formylated humanin	1-4	
	activates both formyl peptide	4 1	V.
	receptor-like 1 and 2"		**
	BIOCHEMICAL AND BIOPHYSICAL RESEARCH	2.24	*
	COMMUNICATIONS, ACADEMIC PRESS INC.		*
	ORLANDO, FL, US,	- 1	
	vol. 324, no. 1,		
	5 November 2004 (2004-11-05), pages	1	
	255-261, XP004583794		
	ISSN: 0006-291X		
	* page 256, column 1 *	7, 12	
	* abstract *		
,	POTTON A POT BI NA	1	
Y	BETTEN A ET AL: "A proinflammatory	1-4	TECHNICAL FIELDS
	peptide from Helicobacter pylori activates		SEARCHED (IPC)
	monocytes to induce lymphocyte dysfunction		
	and apoptosis"	100	
	JOURNAL OF CLINICAL INVESTIGATION, NEW		
	YORK, NY, US,		
	vol. 108, no. 8, October 2001 (2001-10),	3.4	
	pages 1221-1228, XP002249986	* -	
l	ISSN: 0021-9738	4,000	
	* page 1221, column 1 *	1, 8	
-	* abstract *		
4	DURSTIN M ET AL: "Differential expression	3 4	
`	of members of the N-formylpeptide receptor	1-4	
1	gene cluster in human phagocytes"		
	30 May 1994 (1994-05-30), BIOCHEMICAL AND		
l	BIOPHYSICAL RESEARCH COMMUNICATIONS,		
	ACADEMIC PRESS INC. ORLANDO, FL, US,	* * * * * * * * * * * * * * * * * * * *	
Ì	PAGE(S) 174-179 , XP002973362		
l	ISSN: 0006-291X	3 %	
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INCOMPLETE SEARCH SHEET C

Application Number EP 04 72 8959

Claim(s) not searched: 5.6

Reason for the limitation of the search:

Claims 5 and 6 cover a pharmaceutical defined as a compound that changes the binding property of any one of the ligand peptides SEQ ID NO:3-7 to the protein defined by SEQ ID NO:1. However, this does not define a compound since it is not clear what compounds fulfill this criteria. In fact, the applicant states on p.78 of the description, that "By using FPRL2, it can be confirmed whether or not various drugs exhibit their pharmacological effects mediated by FPRL2", which means that pharmaceuticals in the prior art may or may not fall in the category claimed by claims 5-6. Consequently, the definition used in these so-called reach-through claims is so unclear, that no meaningful search of claims 5-6 can be carried out.

LACK OF UNITY OF INVENTION SHEET B

Application Number EP 04 72 8959

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-6, 14-17(partly)

A screening method using FPRL2 and the peptides defined by SEQ. ID. N0:3-7

2. claim: 7

A screening method using FPRL2 and measurement of intracellular cAMP levels.

3. claims: 8-10, 14-17(partly)

The protein, or polynucleotide coding for, FPRL2 as a pharmaceutical or diagnostic agent.

4. claims: 11-13, 14-17(partly)

The antibody, or complementary polynucleotide sequence, against FPRL2 as a pharmaceutical or diagnostic agent.

The application lacks a posteriori unity within the meaning of Article 82 EPC for the following reasons: The present application describes a method for screening a compound that affects the activity of the G-protein coupled receptor, Formyl Peptide Receptor Like-2, FPRL2 (SEQ. ID NO:1), using 5 peptides that are apparently new nanomolar inhibitors of FPRL2. Further, the application discloses a pharmaceutical, that acts via FPRL2, therapeutic use of FPRL2, therapeutic use of the polynucleotide encoding FPRL2, diagnostic use of the polynucleotide encoding FPRL2, diagnostic use of the polynucleotide encoding FPRL2, therapeutic use of an antibody against FPRL2, diagnostic use of the antibody against FPRL2, etc. These inventions are not so linked as to form a single general inventive concept, because the linking element, the FPRL2 receptor (SEQ. ID NO:1) is not new (see eg. WO 02/068600). In addition, the pharmaceutical use of FPRL2 is also not novel (WO 03/080098).

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 04 72 8959

This annex lists the patent family members relating to the patent documents cited in the above–mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

17-11-2006

Patent document Publication cited in search report date			Patent family member(s)		Publication date		
WO	03080098	A2	02-10-2003	AU US	2003218716 2006057577	A1 A1	08-10-2003 16-03-2006